
Upper Roanoke River PCB Study
July 29, 2009

Meeting Agenda

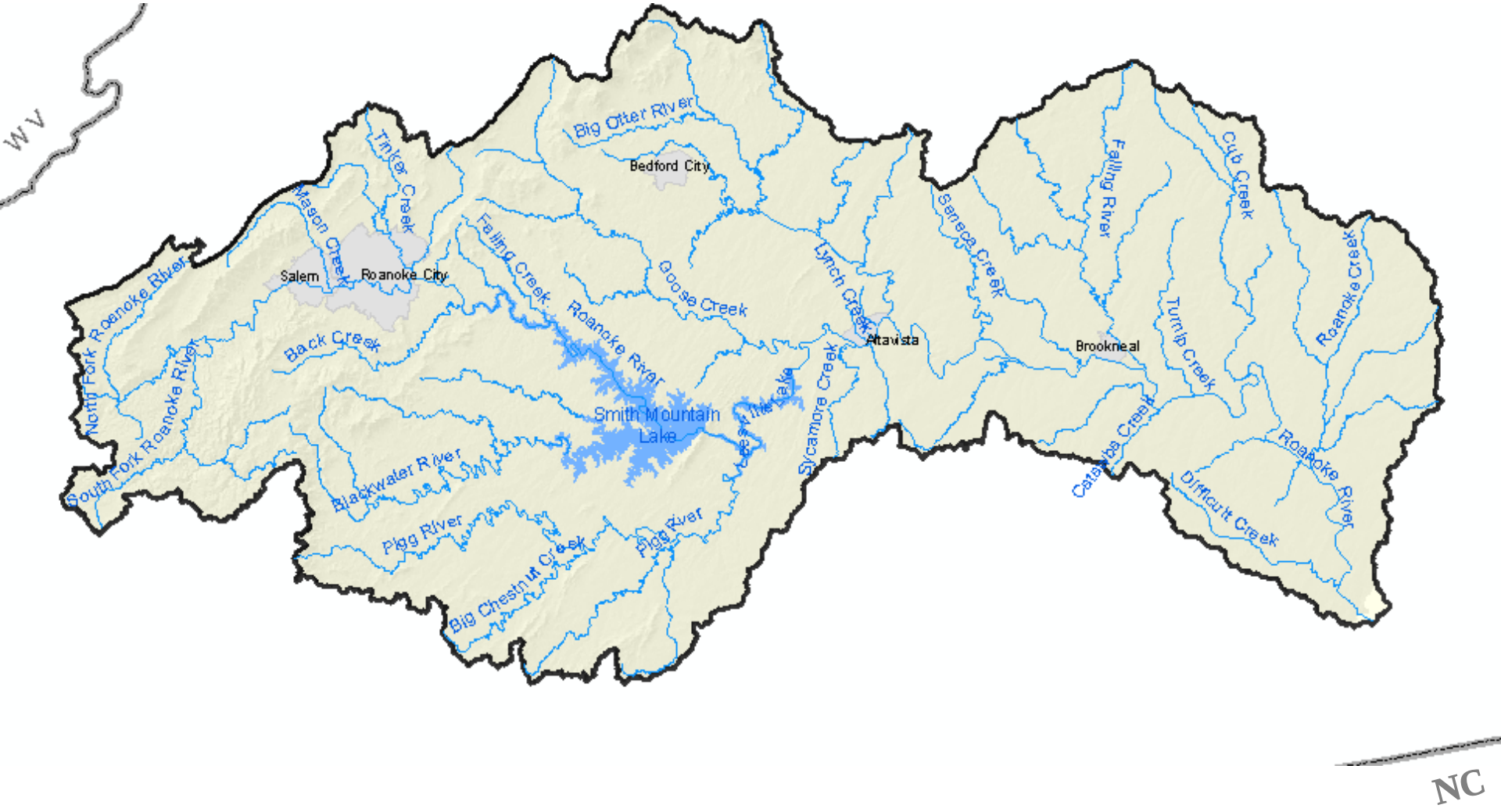
Welcome and Introductions

Upper Roanoke River PCB Study Background.....Mary Dail, DEQ

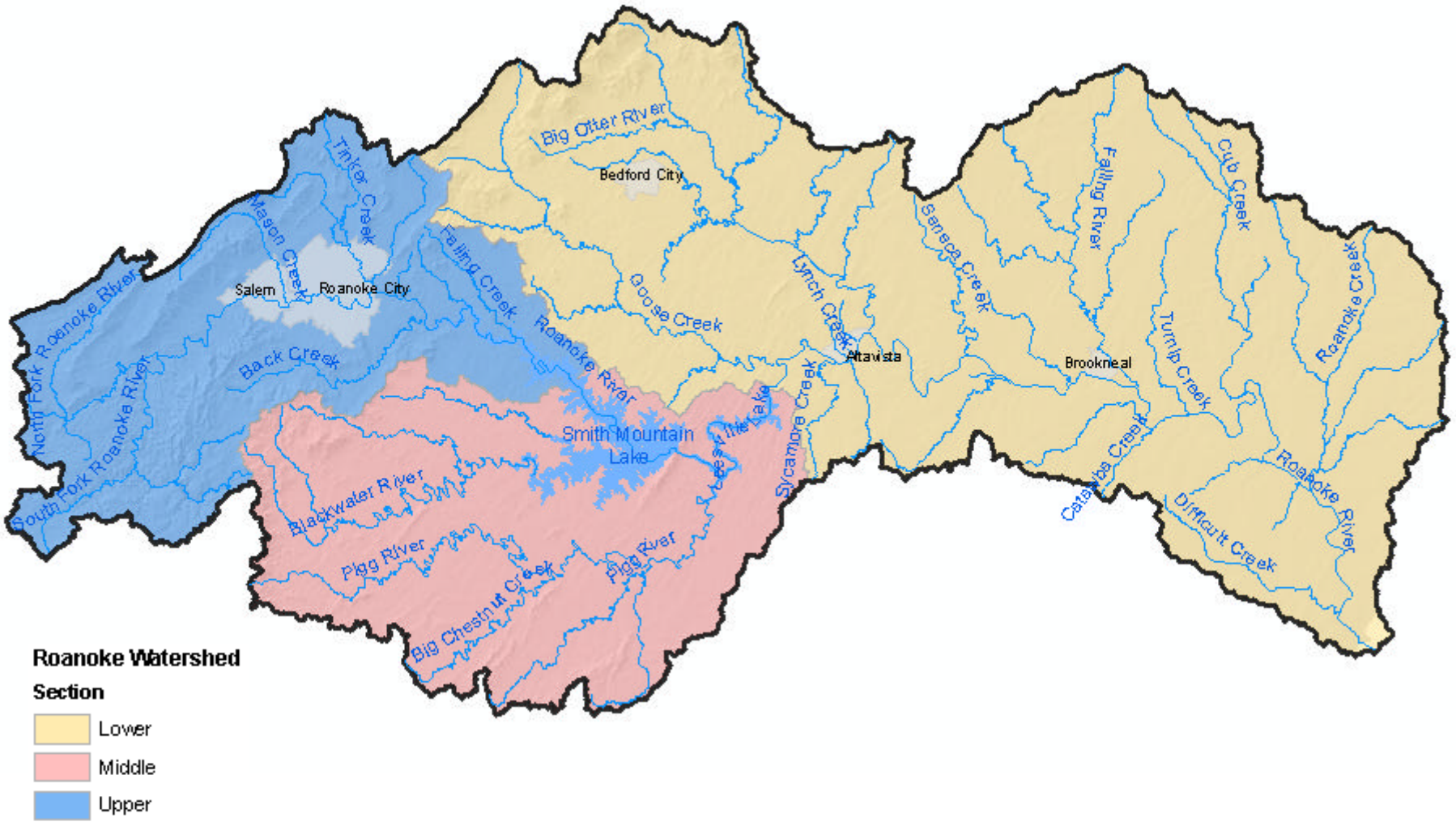
PCB Source Investigation.....Mark Richards, DEQ

PCB Model Approach and Results.....Clint Boschen and Nikolai Gurdian, Tetra Tech, Inc.

Roanoke River Basin



PCB TMDL Study Areas



Upper Roanoke River PCB Impairments

- Virginia Department of Health (VDH) issued a 'Health Advisory' for consumption of fish due to PCB contamination in fish tissue.

- Area of concern: Upper Roanoke River (~37 miles) from the confluence of North and South Fork Roanoke River near Gaging Station at Lafayette downstream to Niagara Dam
  - Includes tributaries: Peters Creek up to Rt. 460 bridge crossing and Tinker Creek up to the confluence with Deer Branch Creek near Rt. 115

- Fish Advisory states:

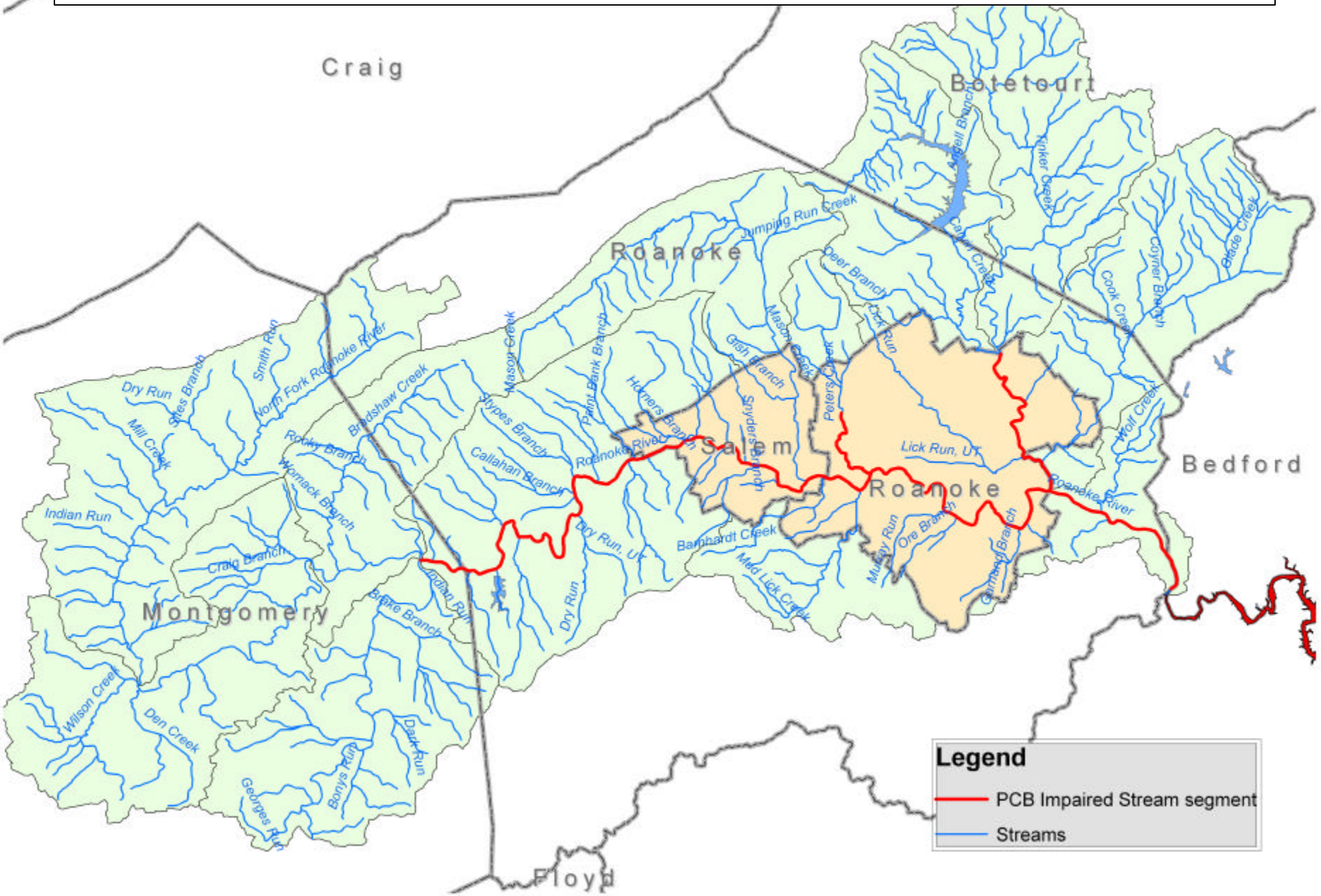
<u>No more than 2 meals per month of the following fish species:</u>

Carp, Redbreast Sunfish, Redhorse Sucker species, Smallmouth Bass, Largemouth Bass, Rock Bass, Bluehead Chub

- Initial 303d Listing in 1998

Photos from Virginia Tech's Virtual Aquarium: http://www.cnr.vt.edu/efish/

Upper Roanoke River PCB Impairments



What is a TMDL?

- TMDL = Total Maximum Daily Load = Special Study
  - Amount of pollution a stream can receive and still meet Water Quality Standards

- A TMDL study identifies all sources of pollution
    - *Point source pollution* is discharged from a discrete location such as a pipe, tank, pit, or ditch
    - *Non-point source pollution* originates from diffuse areas (land surface or atmosphere) having no well-defined source

- Calculate the pollutant loading entering the stream from each source, then calculate the reductions needed from each source to attain water quality standards

- EPA initiated the TMDL and contracted Tetra Tech, Inc.